

PREGNANT WOMEN AND SUBSTANCE ABUSE TREATMENT IN TENNESSEE

Tennessee Department of Mental Health and
Substance Abuse Services

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Purpose

- Analyze substance abuse treatment and recovery court admissions for pregnant women before and after the effective date (4/28/2014) of T.C.A. § 39-13-107 which:
- Allows for the prosecution of women for illegal use of narcotics while pregnant.

Executive summary

- **Substance abuse treatment admissions** of pregnant women increased in the first 3-month period after T.C.A. § 39-13-107 went into effect in April 2014, then decreased.
- **Successful treatment outcomes** for pregnant women were lower than previous periods prior to the new law, and declined even further after the new law.
- **More pregnant women using opioids or cocaine** entered treatment (6.9%) than women using other substances (3.5%) immediately after the law was enacted.
- **Small numbers of pregnant women admitted to recovery courts** prevented a detailed analysis of this population.

Statute on pregnant women and narcotics

Effective date: April 28, 2014 to July 1, 2016

T.C.A. § 39-13-107. Fetus as victim.

(a) For the purposes of this part, "another," "individuals," and "another person" include a human embryo or fetus at any stage of gestation in utero, when any such term refers to the victim of any act made criminal by this part.

(b) Nothing in this section shall be construed to amend the provisions of § 39-15-201, or §§ 39-15-203 -- 39-15-205 and 39-15-207.

(c) (1) Nothing in subsection (a) shall apply to any lawful act or lawful omission by a pregnant woman with respect to an embryo or fetus with which she is pregnant, or to any lawful medical or surgical procedure to which a pregnant woman consents, performed by a health care professional who is licensed to perform such procedure.

(2) Notwithstanding subdivision (c)(1), nothing in this section shall preclude prosecution of a woman for assault under § 39-13-101 for the illegal use of a narcotic drug, as defined in § 39-17-402, while pregnant, if her child is born addicted to or harmed by the narcotic drug and the addiction or harm is a result of her illegal use of a narcotic drug taken while pregnant.

(3) It is an affirmative defense to a prosecution permitted by subdivision (c)(2) that the woman actively enrolled in an addiction recovery program before the child is born, remained in the program after delivery, and successfully completed the program, regardless of whether the child was born addicted to or harmed by the narcotic drug.

Impact of the law

- Women can be prosecuted for assault if their newborn is harmed as a result of their illegal use of a narcotic drug taken while pregnant.
- A woman actively enrolled in an addiction recovery program before the child is born who remains in the program after delivery, and successfully completes the program, has a defense to the prosecution she might encounter.

Research questions

- Did the number of treatment admissions for pregnant women using any substance increase after the law change?
- Did the number of pregnant women who are successful in treatment increase after the law change?
- Did the number of treatment admissions for pregnant women using opioids and cocaine increase after the law change?

Data source and limitations

- Data from the Tennessee Web Information Technology System (TN-WITS) was used in this analysis.
- TN-WITS contains treatment data only for facilities receiving state funding from TDMHSAS.
- Narcotics was defined as opioids (prescription opioids, methadone, and heroin) and cocaine for this analysis. The statutory definition of narcotic drugs can be found at T.C.A. § 39-17-402.
- Variability in the way providers have entered admission and discharge dates may have affected results.

Data analysis

Population

Women admitted and discharged from:

- Substance abuse treatment programs after January 31, 2011
- Recovery courts after July 31, 2013

Time Periods

To highlight the differences before and after the law was enacted, data was aggregated into 3-month time periods as follows:

- February-April
- May-July
- August-October
- November-January

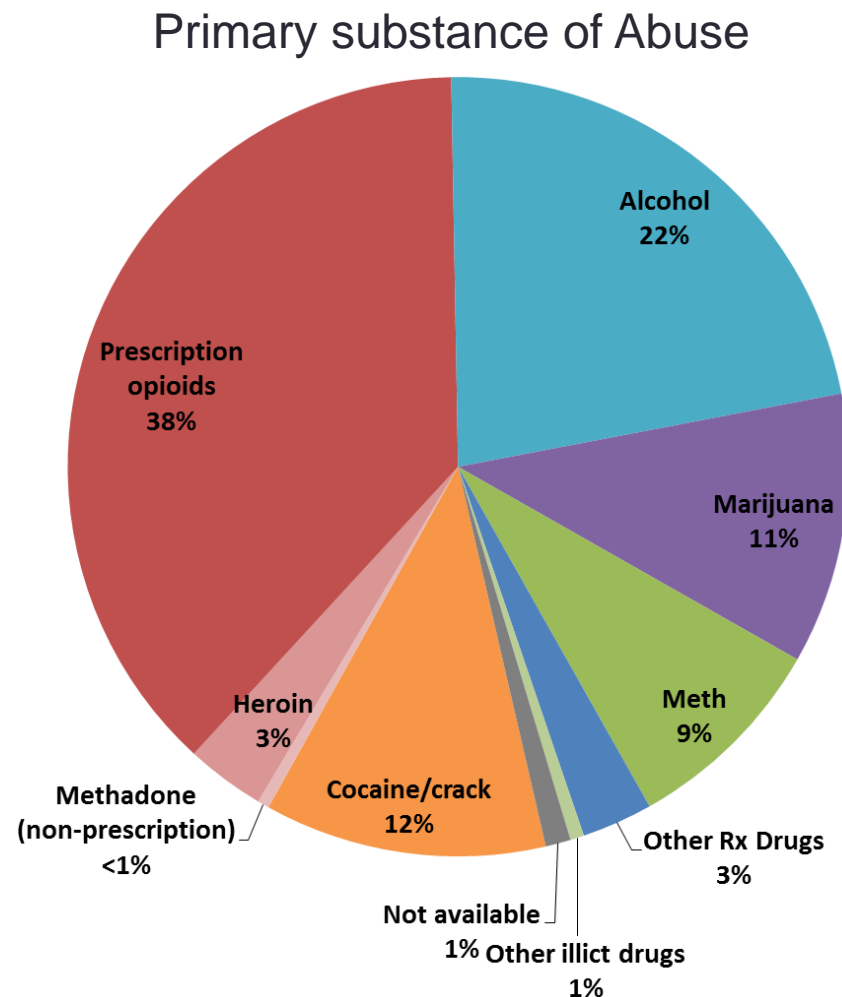
WOMEN'S TREATMENT ADMISSIONS FOR ANY SUBSTANCE OF ABUSE

Descriptive statistics

Figure 1. Treatment admissions for all women: Feb 2011- Jan 2015

	Frequency	%
Pregnant		
No	17,950	92.5
Yes	734	3.8
Unknown	721	3.7
Primary Substance		
Prescription opioids	7,353	37.9
Heroin	635	3.3
Methadone (non-prescription)	93	0.5
Cocaine/crack	2,268	11.7
Alcohol	4,321	22.3
Marijuana	2,182	11.2
Meth	1,670	8.6
Other Rx Drugs	570	2.9
Other illicit drugs	111	0.6
Not available	202	1.0

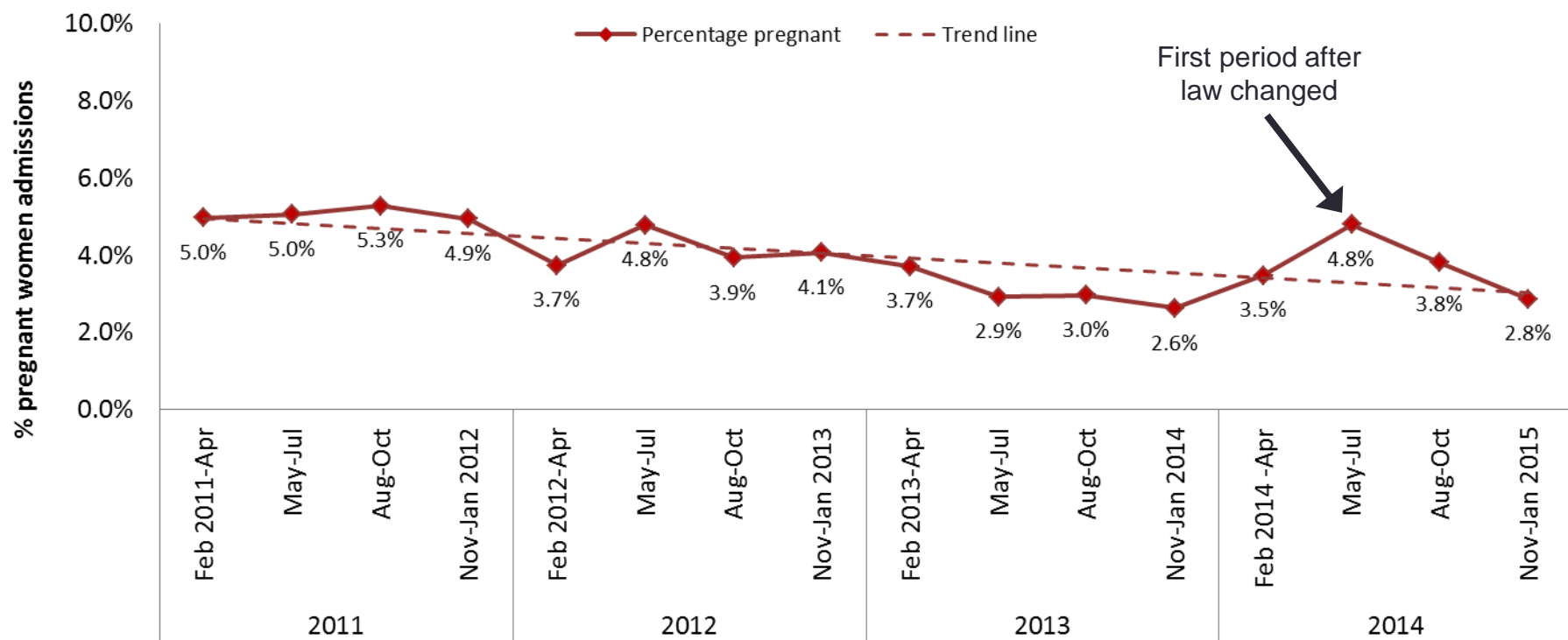
Source: TN-WITS.



Note. N = 19,405. Percentages rounded to whole numbers.

The percentage of admissions of pregnant women increased immediately after the law change, then decreased.

Figure 2. Pregnant women as a percent of all women's treatment admissions



The dotted trend line shows that overall the percentage of women entering treatment pregnant has been decreasing over time.

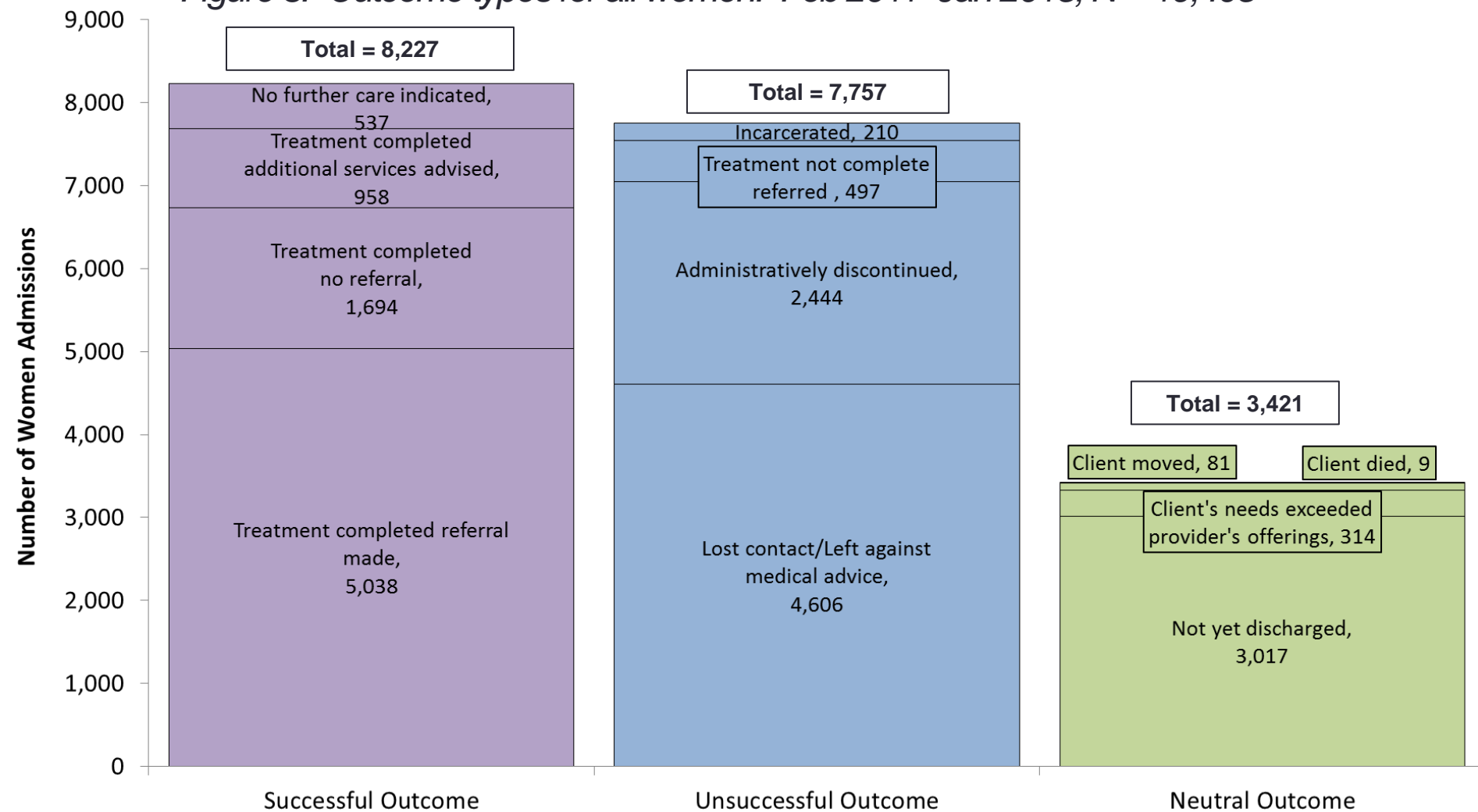
Note: Percentages computed based on N = 19,405; pregnant = 734; not pregnant = 17,950. Those with unknown pregnancy status (n = 721) were excluded from analyses.

Source: TN-WITS.

WOMEN'S TREATMENT OUTCOMES FOR ANY SUBSTANCE OF ABUSE

Outcome types

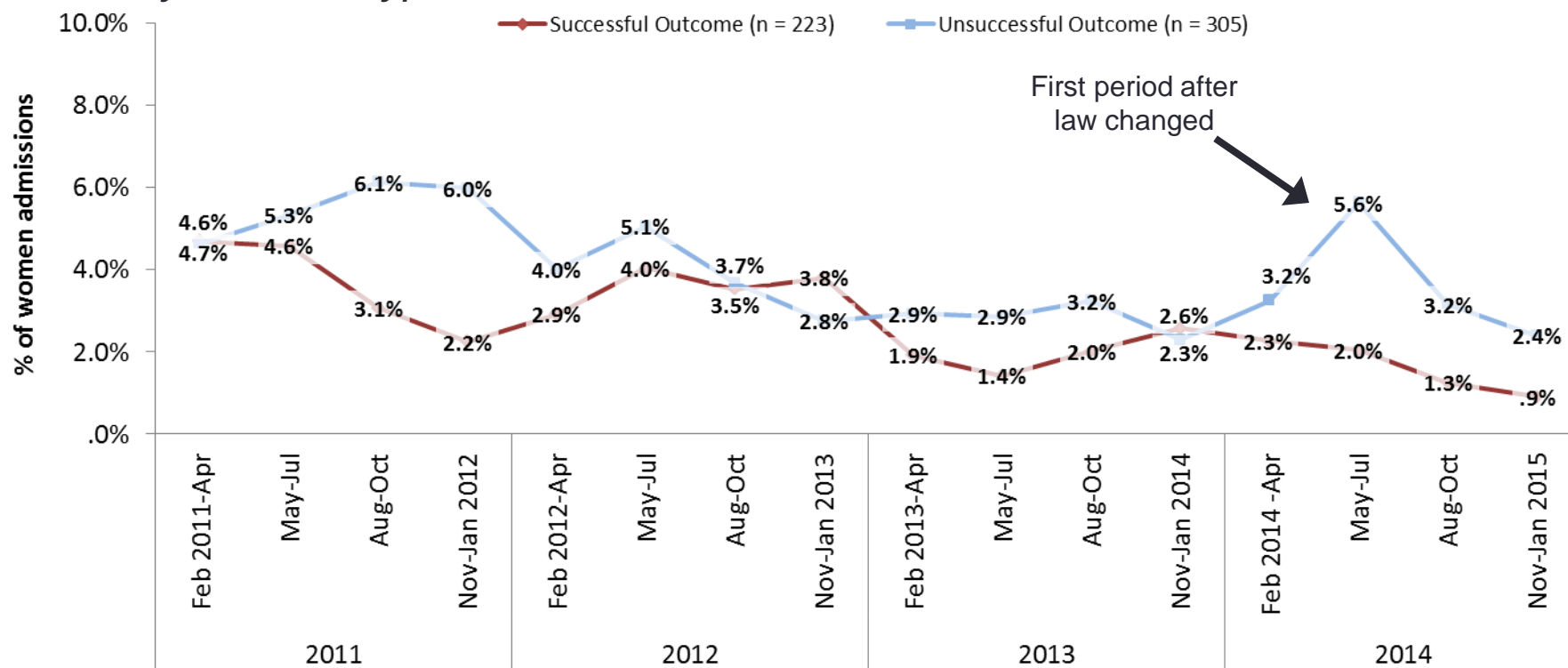
Figure 3. Outcome types for all women: Feb 2011- Jan 2015, N = 19,405



Source: TN-WITS.

Of the women who entered treatment immediately after the law change, more pregnant women had an unsuccessful outcome (5.6%) than a successful outcome (2.0%).

Figure 4. Pregnant women as a percent of all women's treatment admissions by outcome type

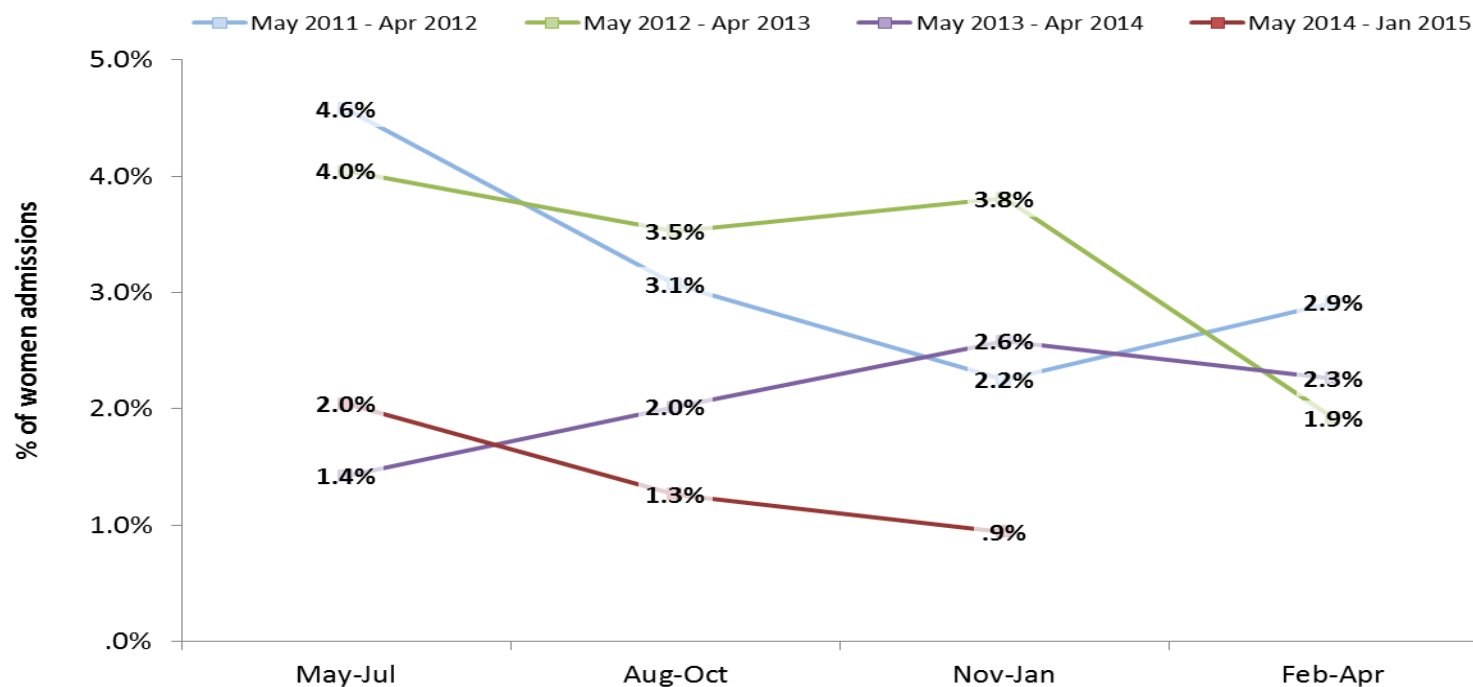


Note: Percentages computed based on N = 18,684. Those with unknown pregnancy status (n = 721) were excluded. Only successful and unsuccessful categories are presented in the analysis. Neutral outcomes are not shown to aid in interpretation of findings.

Source: TN-WITS.

The red line shows that the percentage of pregnant women with a successful outcome after the law change was lower than most previous time periods and declined even more in the subsequent time periods.

Figure 5. Pregnant women with successful outcomes as a percent of all women's treatment admissions

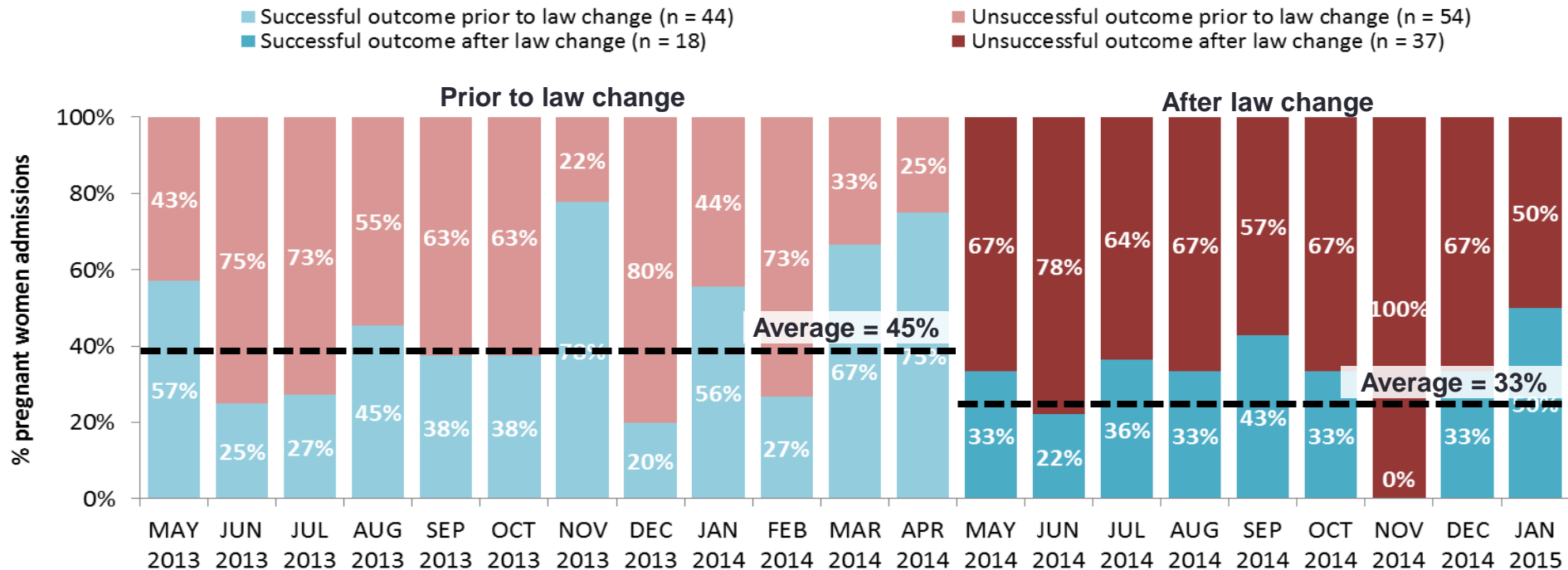


Note: The lines depict the year over year trends in successful outcomes. The total number of successful outcomes across all time periods is 223. percentages computed based on N = 18,684.

Source: TN-WITS.

The average percentage of pregnant women who had a successful outcome decreased after the law change.

Figure 6. Outcome type as a percentage of pregnant women's admissions



The average percentage of pregnant women that were successful in the 12 months prior to the law change was 45% (lighter blue color bars) compared to 33% of pregnant women that were successful in the 9 months after the law change (darker blue color bars).

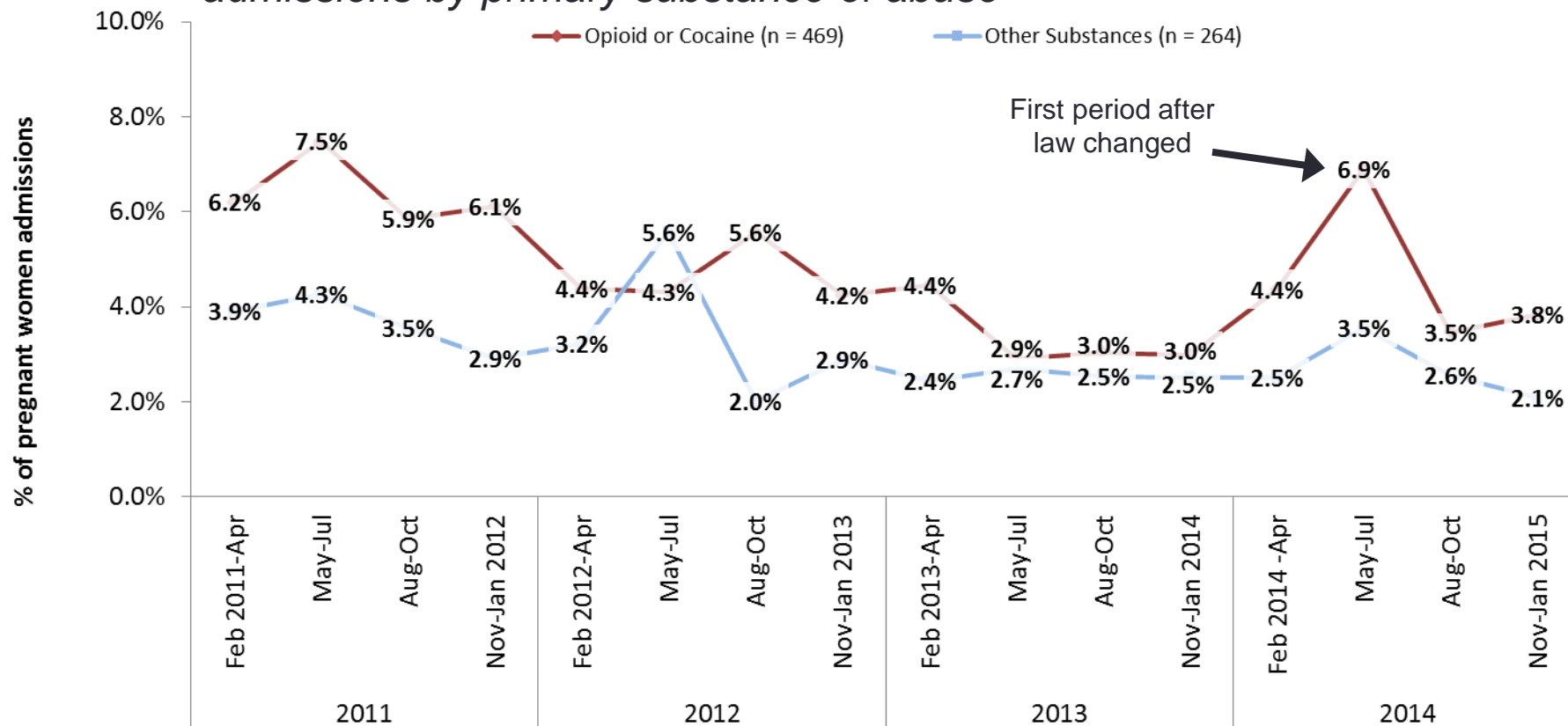
Note: N = 153. Women with neutral outcomes were excluded from these percentages. The average percentages are shown as black dashed lines.

Source: TN-WITS.

TREATMENT ADMISSIONS AND OUTCOMES FOR WOMEN USING OPIOIDS OR COCAINE

Of the women who entered treatment immediately after the law change, more pregnant women used opioids or cocaine (6.9%) than used other substances (3.5%)

Figure 7. Pregnant women as a percent of all women's treatment admissions by primary substance of abuse

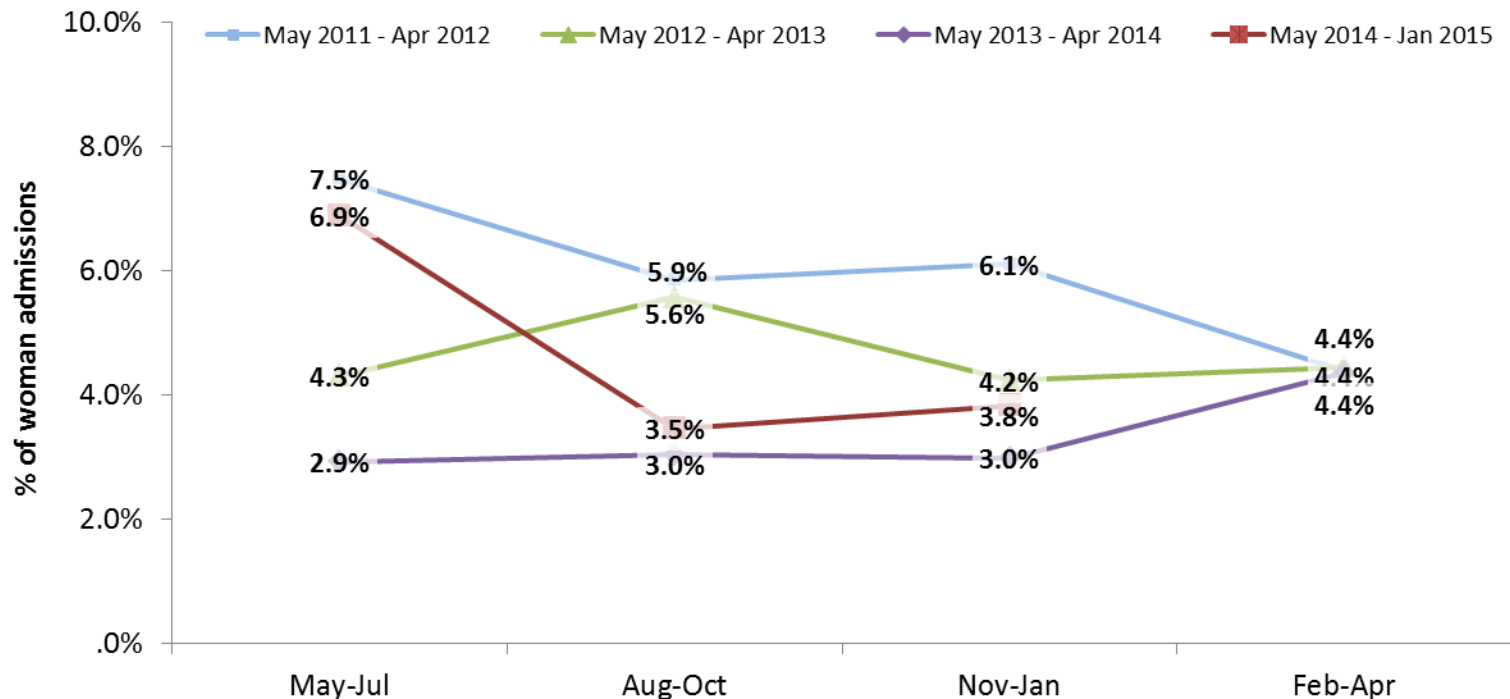


Note: percentages computed based on N = 18,684. Those with unknown pregnancy status (n = 721) were excluded from analysis.

Source: TN-WITS.

The red line shows that the percentage of pregnant women using opioids or cocaine admitted to treatment after the law was higher than previous periods, then declined.

Figure 8. Pregnant women using opioids or cocaine as a percent of all women's treatment admissions

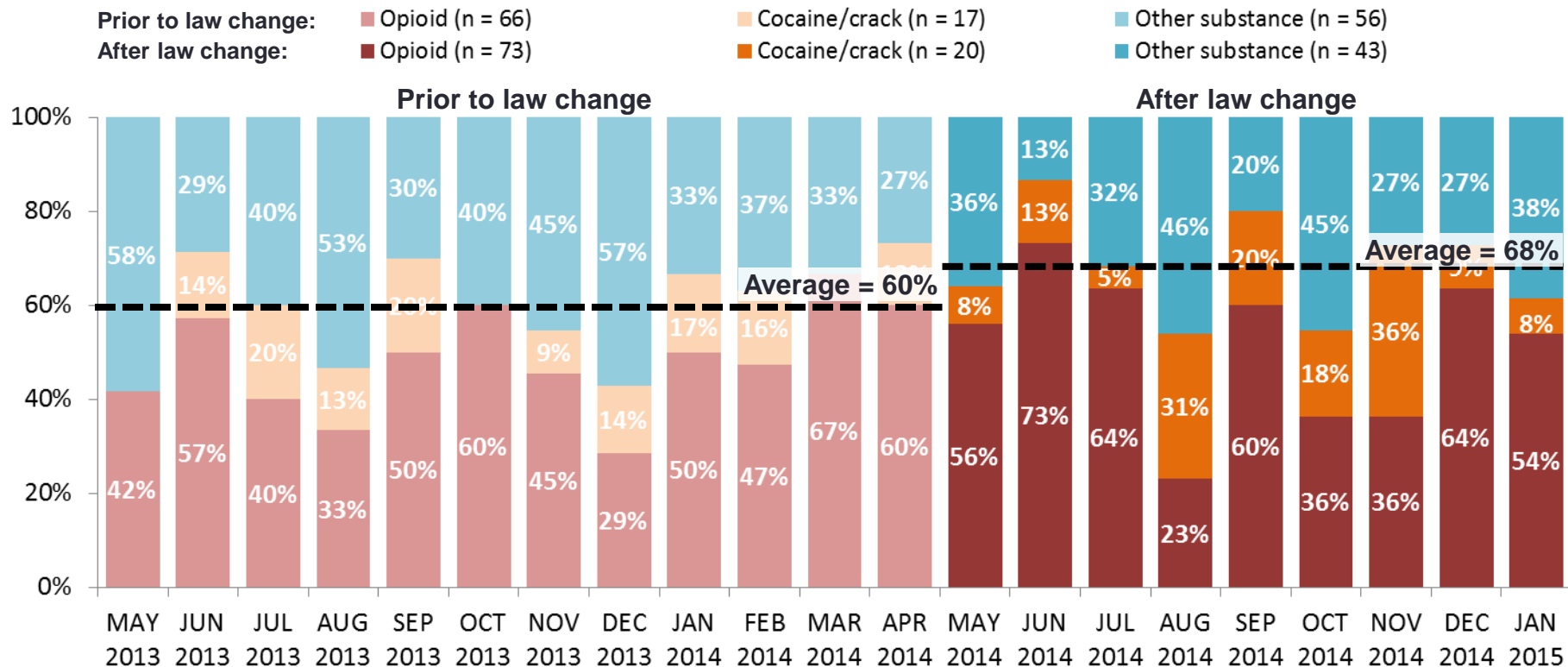


Note: The lines depict the year over year trends for opioids or cocaine admissions. The red line shows the trend in opioid or cocaine admissions after the law changed. The other lines show the three years prior to the law change. The total number of opioid or cocaine admissions across all time periods is 469. Percentages computed based on N = 18,684.

Source: TN-WITS.

The average percentage of pregnant women abusing opioids or cocaine who were admitted to treatment increased after the law change.

Figure 9. Opioid and cocaine use as a percentage of pregnant women's admissions



The average percentage of pregnant women with primary opioid or cocaine use in the 12 months prior to the law change was 60% (lighter color bars) compared to 68% of pregnant women with primary opioid use in the 9 months after the law change (darker color bars).

Note: N = 275. The average percentages are shown as black dashed lines.

Source: TN-WITS.

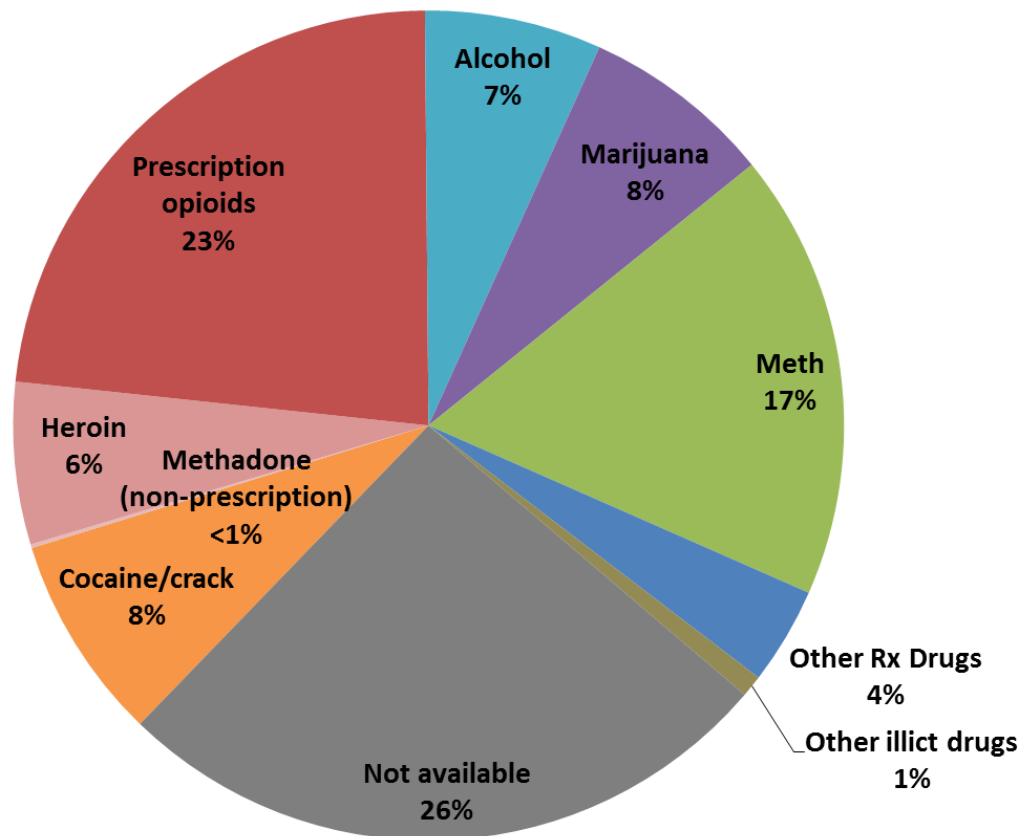
WOMEN'S ADMISSIONS TO RECOVERY COURTS

Descriptive statistics

Figure 10. Recovery court admissions for all women:
Aug 2013 - Jan 2015, N = 712

Primary Substance

	Frequency	%
Pregnant		
No	644	90.4
Yes	26	3.7
Unknown	42	5.9
Primary Substance		
Prescription opioids	165	23.2
Heroin	45	6.3
Methadone (non-prescription)	1	0.1
Cocaine/crack	57	8.0
Alcohol	49	6.9
Marijuana	53	7.4
Meth	124	17.4
Other Rx Drugs	27	3.8
Other illicit drugs	6	0.9
Not available	185	26.0
Discharge Type		
Successful Outcome	54	7.6
Unsuccessful Outcome	110	15.4
Neutral Outcome	548	77.0



Note: Percentages rounded to whole numbers.

Note: Neutral outcome includes those who were discharged for neutral reasons and those who were still enrolled as of Jan 31, 2015.

Source: TN-WITS.

The percentage of pregnant women admitted to recovery courts remained constant after the law change.

Table 1. Number and percentage of women admissions to recovery court by pregnancy status

		Not Pregnant	Pregnant	Monthly total
Prior to law change	Aug 2013	51	0	51
	Sep 2013	33	3	36
	Oct 2013	48	1	49
	Nov 2013	30	0	30
	Dec 2013	26	3	29
	Jan 2014	31	0	31
	Feb 2014	43	4	47
	Mar 2014	47	0	47
	Apr 2014	38	3	41
	Total	347	14	361
Overall percentage pregnant in 9 months prior to law change: 3.9%				
After law change	May 2014	30	1	31
	Jun 2014	21	1	22
	Jul 2014	33	2	35
	Aug 2014	26	2	28
	Sep 2014	40	1	41
	Oct 2014	39	1	40
	Nov 2014	29	0	29
	Dec 2014	28	1	29
	Jan 2015	51	3	54
	Total	297	12	309
Overall percentage pregnant in 9 months after law change: 3.9%				
Grand total		644	26	670

- The percentage of women admissions to recovery courts who were pregnant (3.9%) did not change before and after the enactment of T.C.A. §39-13-107.
- The small number of pregnant women did not allow more detailed statistical analysis.

Note: Data is presented starting Aug 2013. This is the month after the database went “live”. The first month (Jul 2013) is not shown due to data entry issues surrounding database training.